

## PATENT COOPERATION TREATY

From the INTERNATIONAL BUREAU

PCT

NOTIFICATION OF THE RECORDING  
OF A CHANGE(PCT Rule 92bis.1 and  
Administrative Instructions, Section 422)

Date of mailing (day/month/year) 09 January 2002 (09.01.02)
Applicant's or agent's file reference WO 24604
International application No. PCT/EP99/06660

To:  PELLMANN, Hans-Bernd Tiedtke-Bühling-Kinne Bavariaring 4 D-80336 Munich ALLEMAGNE
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## IMPORTANT NOTIFICATION

International filing date (day/month/year)  
09 September 1999 (09.09.99)

## 1. The following indications appeared on record concerning:

the applicant     the inventor     the agent     the common representative

Name and Address NOKIA NETWORKS OY	State of Nationality FI	State of Residence FI
	Telephone No.	
	Facsimile No.	
	Teleprinter No.	

## 2. The International Bureau hereby notifies the applicant that the following change has been recorded concerning:

the person     the name     the address     the nationality     the residence

Name and Address NOKIA CORPORATION	State of Nationality FI	State of Residence FI
	Telephone No.	
	Facsimile No.	
	Teleprinter No.	

## 3. Further observations, if necessary:

4. A copy of this notification has been sent to:
--

the receiving Office     the designated Offices concerned  
 the International Searching Authority     the elected Offices concerned  
 the International Preliminary Examining Authority     other:

The International Bureau of WIPO 34, chemin des Colombettes 1211 Geneva 20, Switzerland  Facsimile No.: (41-22) 740.14.35	Authorized officer  Ki-Nam HA  Telephone No.: (41-22) 338.83.38
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## PATENT COOPERATION TREATY

From the INTERNATIONAL BUREAU

PCT

NOTIFICATION OF ELECTION  
(PCT Rule 61.2)

Date of mailing (day/month/year)  
18 June 2001 (18.06.01)

To:

Commissioner  
US Department of Commerce  
United States Patent and Trademark  
Office, PCT  
2011 South Clark Place Room  
CP2/5C24  
Arlington, VA 22202  
ETATS-UNIS D'AMERIQUE

in its capacity as elected Office

International application No. PCT/EP99/06660	Applicant's or agent's file reference WO 24604
International filing date (day/month/year) 09 September 1999 (09.09.99)	Priority date (day/month/year)
<b>Applicant</b>	
USKELA, Sami et al	

1. The designated Office is hereby notified of its election made:

in the demand filed with the International Preliminary Examining Authority on:

09 April 2001 (09.04.01)

in a notice effecting later election filed with the International Bureau on:

\_\_\_\_\_

2. The election  was

was not

made before the expiration of 19 months from the priority date or, where Rule 32 applies, within the time limit under Rule 32.2(b).

The International Bureau of WIPO 34, chemin des Colombettes 1211 Geneva 20, Switzerland	Authorized officer  Juan Cruz
Facsimile No.: (41-22) 740.14.35	Telephone No.: (41-22) 338.83.38

## PATENT COOPERATION TREATY

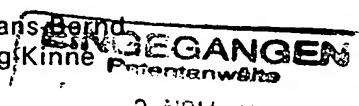
PCT

## NOTIFICATION OF RECEIPT OF RECORD COPY

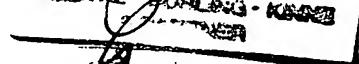
(PCT Rule 24.2(a))

From the INTERNATIONAL BUREAU

To:

PELLMANN, Hans Bernd  
 Tiedtke-Bühlung Kinne   
 Bavariaring 4  
 D-80336 Munich  
 ALLEMAGNE

~ 2. NOV. 1999  
 TIEDTKE - BÜHLUNG - KINNE



Date of mailing (day/month/year) 26 October 1999 (26.10.99)	<b>IMPORTANT NOTIFICATION</b>
Applicant's or agent's file reference WO 24604	International application No. PCT/EP99/06660

The applicant is hereby notified that the International Bureau has received the record copy of the international application as detailed below.

Name(s) of the applicant(s) and State(s) for which they are applicants:

NOKIA TELECOMMUNICATIONS OY (for all designated States except US)  
 USKELA, Sami et al (for US)

International filing date : 09 September 1999 (09.09.99)

Priority date(s) claimed :

Date of receipt of the record copy by the International Bureau : 18 October 1999 (18.10.99)

List of designated Offices :

AP :GH,GM,KE,LS,MW,SD,SL,SZ,UG,ZW  
 EA :AM,AZ,BY,KG,KZ,MD,RU,TJ,TM  
 EP :AT,BE,CH,CY,DE,DK,ES,FI,FR,GB,GR,IE,IT,LU,MC,NL,PT,SE  
 OA :BF,BJ,CF,CG,CI,CM,GA,GN,GW,ML,MR,NE,SN,TD,TG  
 National :AE,AL,AM,AT,AU,AZ,BA,BB,BG,BR,BY,CA,CH,CN,CU,CZ,DE,DK,EE,ES,FI,GB,GD,GE,  
 GH,GM,HR,HU,ID,IL,IN,IS,JP,KE,KG,KP,KR,KZ,LK,LR,LS,LT,LU,LV,MD,MG,MK,MN,MW,MX,  
 NO,NZ,PL,PT,RO,RU,SD,SE,SG,SI,SK,SL,TJ,TM,TR,TT,UA,UG,US,UZ,VN,YU,ZA,ZW

**ATTENTION**

The applicant should carefully check the data appearing in this Notification. In case of any discrepancy between these data and the indications in the international application, the applicant should immediately inform the International Bureau.

In addition, the applicant's attention is drawn to the information contained in the Annex, relating to:

- time limits for entry into the national phase
- confirmation of precautionary designations
- requirements regarding priority documents

A copy of this Notification is being sent to the receiving Office and to the International Searching Authority.

The International Bureau of WIPO 34, chemin des Colombettes 1211 Geneva 20, Switzerland  Facsimile No. (41-22) 740.14.35	Authorized officer:  R. Chrem  Telephone No. (41-22) 338.83.38
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002918039

**INFORMATION ON TIME LIMITS FOR ENTERING THE NATIONAL PHASE**

The applicant is reminded that the "national phase" must be entered before each of the designated Offices indicated in the Notification of Receipt of Record Copy (Form PCT/IB/301) by paying national fees and furnishing translations, as prescribed by the applicable national laws.

The time limit for performing these procedural acts is **20 MONTHS** from the priority date or, for those designated States which the applicant elects in a demand for international preliminary examination or in a later election, **30 MONTHS** from the priority date, provided that the election is made before the expiration of 19 months from the priority date. Some designated (or elected) Offices have fixed time limits which expire even later than 20 or 30 months from the priority date. In other Offices an extension of time or grace period, in some cases upon payment of an additional fee, is available.

In addition to these procedural acts, the applicant may also have to comply with other special requirements applicable in certain Offices. It is the applicant's responsibility to ensure that the necessary steps to enter the national phase are taken in a timely fashion. Most designated Offices do not issue reminders to applicants in connection with the entry into the national phase.

For detailed information about the procedural acts to be performed to enter the national phase before each designated Office, the applicable time limits and possible extensions of time or grace periods, and any other requirements, see the relevant Chapters of Volume II of the PCT Applicant's Guide. Information about the requirements for filing a demand for international preliminary examination is set out in Chapter IX of Volume I of the PCT Applicant's Guide.

GR and ES became bound by PCT Chapter II on 7 September 1996 and 6 September 1997, respectively, and may, therefore, be elected in a demand or a later election filed on or after 7 September 1996 and 6 September 1997, respectively, regardless of the filing date of the international application. (See second paragraph above.)

Note that only an applicant who is a national or resident of a PCT Contracting State which is bound by Chapter II has the right to file a demand for international preliminary examination.

**CONFIRMATION OF PRECAUTIONARY DESIGNATIONS**

This notification lists only specific designations made under Rule 4.9(a) in the request. It is important to check that these designations are correct. Errors in designations can be corrected where precautionary designations have been made under Rule 4.9(b). The applicant is hereby reminded that any precautionary designations may be confirmed according to Rule 4.9(c) before the expiration of 15 months from the priority date. If it is not confirmed, it will automatically be regarded as withdrawn by the applicant. There will be no reminder and no invitation. Confirmation of a designation consists of the filing of a notice specifying the designated State concerned (with an indication of the kind of protection or treatment desired) and the payment of the designation and confirmation fees. Confirmation must reach the receiving Office within the 15-month time limit.

**REQUIREMENTS REGARDING PRIORITY DOCUMENTS**

For applicants who have not yet complied with the requirements regarding priority documents, the following is recalled.

Where the priority of an earlier national, regional or international application is claimed, the applicant must submit a copy of the said earlier application, certified by the authority with which it was filed ("the priority document") to the receiving Office (which will transmit it to the International Bureau) or directly to the International Bureau, before the expiration of 16 months from the priority date, provided that any such priority document may still be submitted to the International Bureau before that date of international publication of the international application, in which case that document will be considered to have been received by the International Bureau on the last day of the 16-month time limit (Rule 17.1(a)).

Where the priority document is issued by the receiving Office, the applicant may, instead of submitting the priority document, request the receiving Office to prepare and transmit the priority document to the International Bureau. Such request must be made before the expiration of the 16-month time limit and may be subjected by the receiving Office to the payment of a fee (Rule 17.1(b)).

If the priority document concerned is not submitted to the International Bureau or if the request to the receiving Office to prepare and transmit the priority document has not been made (and the corresponding fee, if any, paid) within the applicable time limit indicated under the preceding paragraphs, any designated State may disregard the priority claim, provided that no designated Office may disregard the priority claim concerned before giving the applicant an opportunity to furnish the priority document within a time limit which is reasonable under the circumstances.

Where several priorities are claimed, the priority date to be considered for the purposes of computing the 16-month time limit is the filing date of the earliest application whose priority is claimed.

## PATENT COOPERATION TREATY

PCT

NOTIFICATION OF THE RECORDING  
OF A CHANGE(PCT Rule 92bis.1 and  
Administrative Instructions, Section 422)

Date of mailing (day/month/year) 03 December 1999 (03.12.99)
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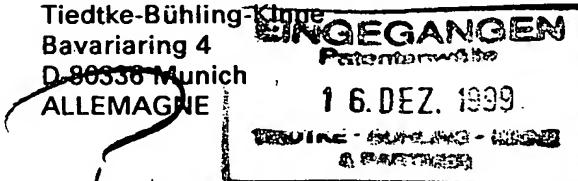
Applicant's or agent's file reference WO 24604
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International application No. PCT/EP99/06660
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From the INTERNATIONAL BUREAU

To:

PELLMANN, Hans-Bernd  
Tiedtke-Bühling-Klime  
Bavariaring 4  
D-80530 Munich  
ALLEMAGNE



## IMPORTANT NOTIFICATION

International filing date (day/month/year) 09 September 1999 (09.09.99)
--

1. The following indications appeared on record concerning:

the applicant     the inventor     the agent     the common representative

Name and Address  NOKIA TELECOMMUNICATIONS OY Keilalahdentie 4 FIN-02150 Espoo Finland	State of Nationality FI	State of Residence FI
	Telephone No. +358 9 1807 0	
	Facsimile No. +358 9 1807 496	
	Teleprinter No.	

2. The International Bureau hereby notifies the applicant that the following change has been recorded concerning:

the person     the name     the address     the nationality     the residence

Name and Address  NOKIA NETWORKS OY Keilalahdentie 4 FIN-02150 Espoo Finland	State of Nationality FI	State of Residence FI
	Telephone No. +358 9 1807 0	
	Facsimile No. +358 9 1807 496	
	Teleprinter No.	

3. Further observations, if necessary:

4. A copy of this notification has been sent to:	
<input checked="" type="checkbox"/> the receiving Office	<input checked="" type="checkbox"/> the designated Offices concerned
<input checked="" type="checkbox"/> the International Searching Authority	<input type="checkbox"/> the elected Offices concerned
<input type="checkbox"/> the International Preliminary Examining Authority	<input type="checkbox"/> other:

The International Bureau of WIPO 34, chemin des Colombelettes 1211 Geneva 20, Switzerland  Facsimile No.: (41-22) 740.14.36	Authorized officer  V. Gross  Telephone No.: (41-22) 338.83.38
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## PATENT COOPERATION TREATY

PCT

NOTIFICATION OF THE RECORDING  
OF A CHANGE(PCT Rule 92bis.1 and  
Administrative Instructions, Section 422)

Date of mailing (day/month/year) 09 January 2002 (09.01.02)
Applicant's or agent's file reference WO 24604
International application No. PCT/EP99/06660

From the INTERNATIONAL BUREAU

To:

PELLMANN, Hans-Bernd

Tiedtke-Bühling-Kinne

Bavariaring 4

D-80336 Munich

ALLEMAGNE

RECEIVED  
EINGEGANGEN

18. Jan. 2002

TBK - PATENT

## IMPORTANT NOTIFICATION

International filing date (day/month/year)  
09 September 1999 (09.09.99)

## 1. The following indications appeared on record concerning:

the applicant     the inventor     the agent     the common representative

Name and Address NOKIA NETWORKS OY	State of Nationality FI	State of Residence FI
	Telephone No.	
	Facsimile No.	
	Teleprinter No.	

## 2. The International Bureau hereby notifies the applicant that the following change has been recorded concerning:

the person     the name     the address     the nationality     the residence

Name and Address NOKIA CORPORATION	State of Nationality FI	State of Residence FI
	Telephone No.	
	Facsimile No.	
	Teleprinter No.	

## 3. Further observations, if necessary:

## 4. A copy of this notification has been sent to:

<input checked="" type="checkbox"/> the receiving Office	<input type="checkbox"/> the designated Offices concerned
<input type="checkbox"/>	<input checked="" type="checkbox"/> the elected Offices concerned
<input checked="" type="checkbox"/> the International Searching Authority	<input type="checkbox"/> other:
<input checked="" type="checkbox"/> the International Preliminary Examining Authority	

The International Bureau of WIPO 34, chemin des Colombettes 1211 Geneva 20, Switzerland	Authorized officer Ki-Nam HA
Facsimile No.: (41-22) 740.14.35	Telephone No.: (41-22) 338.83.38

PATENT COOPERATION TREATY

PCT

NOTICE INFORMING THE APPLICANT OF THE  
COMMUNICATION OF THE INTERNATIONAL  
APPLICATION TO THE DESIGNATED OFFICES

(PCT Rule 47.1(c), first sentence)

Date of mailing (day/month/year) <b>15 March 2001 (15.03.01)</b>		From the INTERNATIONAL BUREAU	
Applicant's or agent's file reference <b>WO 24604</b>		To: <b>PELLMANN, Hans-Bernd Tiedtke-Bühling-Kinne Bavariaring 4 D-80336 Munich ALLEMAGNE</b>	
		<b>EINGEGANGEN Patentanwälte 27. März 2001 TIEDTKE · BÜHLING · KINNE &amp; PARTNER (GDR)</b>	
International application No. <b>PCT/EP99/06660</b>		IMPORTANT NOTICE	
International filing date (day/month/year) <b>09 September 1999 (09.09.99)</b>		Priority date (day/month/year)	
Applicant <b>NOKIA NETWORKS OY et al</b>			

1. Notice is hereby given that the International Bureau has communicated, as provided in Article 20, the international application to the following designated Offices on the date indicated above as the date of mailing of this Notice:  
**AU,KP,KR,US**

In accordance with Rule 47.1(c), third sentence, those Offices will accept the present Notice as conclusive evidence that the communication of the international application has duly taken place on the date of mailing indicated above and no copy of the international application is required to be furnished by the applicant to the designated Office(s).

2. The following designated Offices have waived the requirement for such a communication at this time:

**AE,AL,AM,AP,AT,AZ,BA,BB,BG,BR,BY,CA,CH,CN,CU,CZ,DE,DK,EA,EE,EP,ES,FI,GB,GD,GE,GH,  
GM,HR,HU,IL,IN,IS,JP,KE,KG,KZ,LK,LR,LS,LT,LU,LV,MD,MG,MK,MN,MW,MX,NO,NZ,OA,  
PL,PT,RO,RU,SD,SE,SG,SI,SK,SL,TJ,TM,TR,TT,UA,UG,UZ,VN,YU,ZA,ZW**

The communication will be made to those Offices only upon their request. Furthermore, those Offices do not require the applicant to furnish a copy of the international application (Rule 49.1(a-bis)).

3. Enclosed with this Notice is a copy of the international application as published by the International Bureau on  
**15 March 2001 (15.03.01) under No. WO 01/19029**

**REMINDER REGARDING CHAPTER II (Article 31(2)(a) and Rule 54.2)**

If the applicant wishes to postpone entry into the national phase until 30 months (or later in some Offices) from the priority date, a demand for international preliminary examination must be filed with the competent International Preliminary Examining Authority before the expiration of 19 months from the priority date.

It is the applicant's sole responsibility to monitor the 19-month time limit.

Note that only an applicant who is a national or resident of a PCT Contracting State which is bound by Chapter II has the right to file a demand for international preliminary examination.

**REMINDER REGARDING ENTRY INTO THE NATIONAL PHASE (Article 22 or 39(1))**

If the applicant wishes to proceed with the international application in the national phase, he must, within 20 months or 30 months, or later in some Offices, perform the acts referred to therein before each designated or elected Office.

For further important information on the time limits and acts to be performed for entering the national phase, see the Annex to Form PCT/IB/301 (Notification of Receipt Copy) and Volume II of the PCT Applicant's Guide.

The International Bureau of WIPO 34, chemin des Colombettes 1211 Geneva 20, Switzerland	Authorized officer <b>J. Zahra</b>
Facsimile No. (41-22) 740.14.35	Telephone No. (41-22) 338.83.38

## PATENT COOPERATION TREATY

PCT

## INFORMATION CONCERNING ELECTED OFFICES NOTIFIED OF THEIR ELECTION

(PCT Rule 61.3)

From the INTERNATIONAL BUREAU

To:

PELLMANN, Hans-Bernd  
 Tiedtke-Bühling KINNE GEGANGEN Patentanwälte  
 Bavariaring 4 D-80336 Munich 25. Juni 2001  
 ALLEMAGNE TIEDTKE · BÜHLING · KINNE & PARTNER (GbR)

Date of mailing (day/month/year) 18 June 2001 (18.06.01)
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Applicant's or agent's file reference WO 24604
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## IMPORTANT INFORMATION

International application No. PCT/EP99/06660	International filing date (day/month/year) 09 September 1999 (09.09.99)	Priority date (day/month/year)
Applicant NOKIA NETWORKS OY et al		

1. The applicant is hereby informed that the International Bureau has, according to Article 31(7), notified each of the following Offices of its election:

EP :AT,BE,CH,CY,DE,DK,ES,FI,FR,GB,GR,IE,IT,LU,MC,NL,PT,SE  
 National :AU,BG,CA,CN,CZ,DE,IL,JP,KP,KR,MN,NO,NZ,PL,RO,RU,SE,SK,US

2. The following Offices have waived the requirement for the notification of their election; the notification will be sent to them by the International Bureau only upon their request:

AP :GH,GM,KE,LS,MW,SD,SL,SZ,UG,ZW  
 EA :AM,AZ,BY,KG,KZ,MD,RU,TJ,TM  
 OA :BF,BJ,CF,CG,CI,CM,GA,GN,GW,ML,MR,NE,SN,TD,TG  
 National :AE,AL,AM,AT,AZ,BA,BB,BR,BY,CH,CU,DK,EE,ES,FI,GB,GD,GE,GH,GM,HR,  
 HU,ID,IN,IS,KE,KG,KZ,LC,LK,LR,LS,LT,LU,LV,MD,MG,MK,MW,MX,PT,SD,SG,SI,SL,  
 TJ,TM,TR,TT,UA,UG,UZ,VN,YU,ZA,ZW

3. The applicant is reminded that he must enter the "national phase" before the expiration of 30 months from the priority date before each of the Offices listed above. This must be done by paying the national fee(s) and furnishing, if prescribed, a translation of the international application (Article 39(1)(a)), as well as, where applicable, by furnishing a translation of any annexes of the international preliminary examination report (Article 36(3)(b) and Rule 74.1).

Some offices have fixed time limits expiring later than the above-mentioned time limit. For detailed information about the applicable time limits and the acts to be performed upon entry into the national phase before a particular Office, see Volume II of the PCT Applicant's Guide.

The entry into the European regional phase is postponed until 31 months from the priority date for all States designated for the purposes of obtaining a European patent.

The International Bureau of WIPO  
 34, chemin des Colombettes  
 1211 Geneva 20, Switzerland

Facsimile No. (41-22) 740.14.35

Authorized officer:

Juan Cruz



Telephone No. (41-22) 338.83.38

# PATENT COOPERATION TREATY

From the:  
INTERNATIONAL PRELIMINARY EXAMINING AUTHORITY

To:

LESON, Thomas  
TIEDTKE-BÜHLING-KINNE  
Bavariaring 4  
D-80336 München  
ALLEMAGNE

RECEIVED  
EINGEGANGEN  
- 2. Nov. 2001  
TBK - PATENT

PCT

WRITTEN OPINION

(PCT Rule 66)

		Date of mailing (day/month/year) 31.10.2001
Applicant's or agent's file reference WO 24604	REPLY DUE	within 0 month(s) and 21 days from the above date of mailing
International application No. PCT/EP99/06660	International filing date (day/month/year) 09/09/1999	Priority date (day/month/year) 09/09/1999
International Patent Classification (IPC) or both national classification and IPC H04L12/18		
Applicant NOKIA NETWORKS OY		

1. This written opinion is the first drawn up by this International Preliminary Examining Authority.

2. This opinion contains indications relating to the following items:

- I  Basis of the opinion
- II  Priority
- III  Non-establishment of opinion with regard to novelty, inventive step and industrial applicability
- IV  Lack of unity of invention
- V  Reasoned statement under Rule 66.2(a)(ii) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement
- VI  Certain document cited
- VII  Certain defects in the international application
- VIII  Certain observations on the international application

3. The applicant is hereby invited to reply to this opinion.

**When?** See the time limit indicated above. The applicant may, before the expiration of that time limit, request this Authority to grant an extension, see Rule 66.2(d).

**How?** By submitting a written reply, accompanied, where appropriate, by amendments, according to Rule 66.3. For the form and the language of the amendments, see Rules 66.8 and 66.9.

**Also:** For an additional opportunity to submit amendments, see Rule 66.4. For the examiner's obligation to consider amendments and/or arguments, see Rule 66.4 bis. For an informal communication with the examiner, see Rule 66.6.

If no reply is filed, the international preliminary examination report will be established on the basis of this opinion.

4. The final date by which the international preliminary examination report must be established according to Rule 69.2 is: 09/01/2002.

01.11.01 ✓

WV 10.11.✓

Name and mailing address of the international preliminary examining authority:   European Patent Office D-80298 Munich Tel. +49 89 2399 - 0 Tx: 523656 epmu d Fax: +49 89 2399 - 4465	Authorized officer / Examiner  Jimenez Hernandez, P
	Formalities officer (incl. extension of time limits)  Barrio Baranano, A Telephone No. +49 89 2399 8621



**I. Basis of the opinion**

1. With regard to the **elements** of the international application (Replacement sheets which have been furnished to the receiving Office in response to an invitation under Article 14 are referred to in this opinion as "originally filed"):

**Description, pages:**

1-11 as originally filed

**Claims, No.:**

1-30 as originally filed

**Drawings, sheets:**

1/3-3/3 as originally filed

2. With regard to the **language**, all the elements marked above were available or furnished to this Authority in the language in which the international application was filed, unless otherwise indicated under this item.

These elements were available or furnished to this Authority in the following language: , which is:

- the language of a translation furnished for the purposes of the international search (under Rule 23.1(b)).
- the language of publication of the international application (under Rule 48.3(b)).
- the language of a translation furnished for the purposes of international preliminary examination (under Rule 55.2 and/or 55.3).

3. With regard to any **nucleotide and/or amino acid sequence** disclosed in the international application, the international preliminary examination was carried out on the basis of the sequence listing:

- contained in the international application in written form.
- filed together with the international application in computer readable form.
- furnished subsequently to this Authority in written form.
- furnished subsequently to this Authority in computer readable form.
- The statement that the subsequently furnished written sequence listing does not go beyond the disclosure in the international application as filed has been furnished.
- The statement that the information recorded in computer readable form is identical to the written sequence listing has been furnished.

4. The amendments have resulted in the cancellation of:

- the description,        pages:
- the claims,        Nos.:

**WRITTEN OPINION**

International application No. PCT/EP99/06660

the drawings,      sheets:

5.  This report has been established as if (some of) the amendments had not been made, since they have been considered to go beyond the disclosure as filed (Rule 70.2(c)):  
*(Any replacement sheet containing such amendments must be referred to under item 1 and annexed to this report.)*

6. Additional observations, if necessary:

**V. Reasoned statement under Rule 66.2(a)(ii) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement**

1. Statement  
Novelty (N)                  Claims 1-4, 15-18, 20  
Inventive step (IS)            Claims 1-30  
Industrial applicability (IA)   Claims

2. Citations and explanations  
see separate sheet

**VII. Certain defects in the international application**

The following defects in the form or contents of the international application have been noted:  
see separate sheet

**VIII. Certain observations on the international application**

The following observations on the clarity of the claims, description, and drawings or on the question whether the claims are fully supported by the description, are made:  
see separate sheet

**Cited Documents**

D1: JIANZHONG ZHOU: 'Heterogeneous multicasting based on RSVP and QoS filters' COMMUNICATION TECHNOLOGY PROCEEDINGS, 1998, [Online] vol. 2, 22 - 24 October 1998, pages 1-8, XP002140105 ICCT '98 ISBN: 7-80090-827-5 Retrieved from the Internet: <URL:www.iel.ihs.com> [retrieved on 2000-06-14]

**Re Item V**

**Reasoned statement under Rule 66.2(a)(ii) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement**

1. The subject-matter of independent claim 1 is not novel, Art. 33 (1) and (2) PCT:
  - 1.1 D1, which relates to the same area of heterogeneous multicasting in packet-switched networks as the application, is considered as the closest prior art.

D1 discloses, in the terminology of claim 1, a method in a packet-switched network for supplying data packets to receivers belonging to a multicast group, comprising the steps of: receiving data packets from a sender; buffering data packets the destination address of which is a multicast address of a multicast group; determining the addresses of the receivers of the multicast group indicated by the multicast address (see Title, page 1, lines 6-9, page 2, lines 12-14, page 5, lines 13,14, Figure 4)(\*).

D1 also discloses the steps of determining receiver-specific parameters (page 2, line 19, page 4, lines 2-4), filtering the multicast data packets in accordance with the receiver-specific parameters for each receiver of the multicast group and supplying the filtered multicast data packets to the determined receiver addresses (page 4, last paragraph, page 5, point 3.3.1 and Fig. 4).

D1 therefore discloses all the features of claim 1.

(\*) It is further noted that lines 1-8 of Claim 1 are common knowledge in multicast technique as acknowledged by the Applicant in the Description, page 1, lines 20-

28. Some of the features defined in that part of Claim 1 may not be explicitly described in **D1**, however all these features (eg determining addresses belonging to a multicast group, buffering multicast packets) are inherent in the context of **D1**, which discloses multicasting based on RSVP and IGMP. See also eg IETF RFC 966, "A Multicast Extension to the Internet Protocol" dated Dec. 1985.

If novelty should be disputed based on some minor difference of interpretation, it is pointed out that the subject-matter of claim 1 would in any case not involve an inventive step over the disclosure of **D1** (Art. 33(3) PCT), given that **D1** attempts to solve the same problem ("*considering different needs of different subscribers belonging to a multicast group*", lines 31, 32 of page 1 of the Description; "*...support for heterogeneous group communication..., the data stream to be forwarded can be tailored to the individual needs of single group members*", **D1**, page 1, last paragraph - page 2, first paragraph) and describes the same type of solution as presently claimed in claim 1.

2. The subject-matter of independent claim 6 does not involve an inventive step over the disclosure of **D1** and claim 6 therefore does not meet the requirements of Art. 33 (1) and (3) PCT:
  - 2.1 The only difference between the subject-matter of claim 6 and that of claim 1, which is fully anticipated by **D1**, is that **addresses** are filtered, ie packets are filtered depending on the **destination address**. However, this is a common variation. Actually, address filtering based on receiver-specific parameters as defined in claim 6 is also a type of packet filtering based on receiver-specific parameters as defined in claim 1, in which the filtering function is an abrupt one: packet discarding.
3. The lack of novelty objection starting from **D1** (Art. 33 (1) and (2) PCT) also applies to the subject-matter of independent claim 15, which corresponds to that of claim 1:
  - 3.1 Claim 15 relates to an apparatus in a packet-switched network comprising means which are characterized by performing the method steps defined in claim 1 and provides no additional technical feature. Therefore the reasoning in Point 1 also

applies to claim 15.

4. The lack of inventive step objection starting from **D1** (Art. 33 (1) and (3) PCT) also applies to the subject-matter of independent claim 21, which corresponds to that of claim 6:
- 4.1 Claim 21 relates to an apparatus in a packet-switched network comprising means which are characterized by performing the method steps defined in claim 6 and provides no additional technical feature. Therefore the reasoning in Point 2 also applies to claim 21.
5. The additional features of dependent claims 2-5, 7-14, 16-20 and 22-30 do not seem to add anything novel and inventive to the independent claims because these features are either known from the closest prior art document **D1** (claims 2-4, 11, 16-18, 20, 22, 25, 26, 30) or common measures or variations (claims 5, 7-10, 12-14, 19, 23, 24, 27 and 28).
6. The application thus seems not to contain any patentable subject-matter.

Should the Applicant nevertheless regard some particular matter as patentable, an independent claim including such particular matter should be filed, taking account of Rule 6.3(b) PCT. The Applicant should also indicate in the letter of reply **the difference vis à vis the state of the art and the inventive significance thereof.**

**Re Item VII**

**Certain defects in the international application**

1. The independent claims should be in the two-part form vis-à-vis **D1**, Rule 6.3(b) PCT.
2. **D1** should be mentioned in the description, Rule 5.1(a)(ii) PCT.
3. The description should be adapted to any new claims, Rule 5.1(a)(iii) PCT.

**Re Item VIII**

**Certain observations on the international application**

1. The claims should define the relevant subject-matter in terms of a single independent claim in each category followed by dependent claims covering features which are merely optional (conciseness, Art. 6 PCT and Rule 6.4 PCT). Although claims 1 and 6 have been drafted as separate independent claims, they appear to relate effectively to the same subject-matter and to differ from each other only with regard to the definition of the subject-matter for which protection is sought and in respect of the terminology used for the features of that subject-matter, see also Item V, Point 2.1. The aforementioned claims therefore lack conciseness. Moreover, lack of clarity of the claims as a whole arises, since the plurality of independent claims makes it difficult to determine the matter for which protection is sought, and places an undue burden on others seeking to establish the extent of the protection.

Hence, claims 1 and 6 in the method category and the corresponding claims 15 and 21 in the apparatus category do not meet the requirements of Article 6 PCT. A single independent claim in each category appears in this case appropriate.

2. The wording "without departing from the true **spirit** and scope of the invention" on page 11, line 23 of the description casts doubts on the scope of the claims (Art. 6 PCT), see PCT International Preliminary Examination Guidelines, III-4.3a.
3. The apparatus claims 15, 18, 20, 21, 22, 24, 27, 28 and 30 are partially characterized by method features (eg "...*wherein the routing means (2) filters...*" in claim 15), thus rendering the category of these claims unclear. This deficiency could be overcome by re-wording these features with "adapted to", eg "...*wherein the routing means (2) is adapted to filter...*", etc. (Art. 6 PCT).
4. Claim 7 is rendered unclear (Art. 6 PCT) due to the lack of an antecedent definition for the expression "*the detected results*" (claim 7, line 18).

REC'D 18 DEC 2001

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**INTERNATIONAL PRELIMINARY EXAMINATION REPORT**  
**(PCT Article 36 and Rule 70)**

12

Applicant's or agent's file reference  WO 24604	<b>FOR FURTHER ACTION</b>	See Notification of Transmittal of International Preliminary Examination Report (Form PCT/IPEA/416)
International application No.  PCT/EP99/06660	International filing date (day/month/year)  09/09/1999	Priority date (day/month/year)  09/09/1999
International Patent Classification (IPC) or national classification and IPC  H04L12/18		
Applicant  NOKIA NETWORKS OY		

1. This international preliminary examination report has been prepared by this International Preliminary Examining Authority and is transmitted to the applicant according to Article 36.

2. This REPORT consists of a total of 7 sheets, including this cover sheet.

- This report is also accompanied by ANNEXES, i.e. sheets of the description, claims and/or drawings which have been amended and are the basis for this report and/or sheets containing rectifications made before this Authority (see Rule 70.16 and Section 607 of the Administrative Instructions under the PCT).

These annexes consist of a total of sheets.

3. This report contains indications relating to the following items:

- I  Basis of the report
- II  Priority
- III  Non-establishment of opinion with regard to novelty, inventive step and industrial applicability
- IV  Lack of unity of invention
- V  Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement
- VI  Certain documents cited
- VII  Certain defects in the international application
- VIII  Certain observations on the international application

Date of submission of the demand  09/04/2001	Date of completion of this report  14.12.2001
Name and mailing address of the international preliminary examining authority:  European Patent Office D-80298 Munich Tel. +49 89 2399 - 0 Tx: 523656 epmu d Fax: +49 89 2399 - 4465	Authorized officer  Jimenez Hernandez, P  Telephone No. +49 89 2399 7938



**INTERNATIONAL PRELIMINARY  
EXAMINATION REPORT**

International application No. PCT/EP99/06660

**I. Basis of the report**

1. With regard to the elements of the international application (*Replacement sheets which have been furnished to the receiving Office in response to an invitation under Article 14 are referred to in this report as "originally filed" and are not annexed to this report since they do not contain amendments (Rules 70.16 and 70.17)*):  
**Description, pages:**

1-11                   as originally filed

**Claims, No.:**

1-30                   as originally filed

**Drawings, sheets:**

1/3-3/3               as originally filed

2. With regard to the language, all the elements marked above were available or furnished to this Authority in the language in which the international application was filed, unless otherwise indicated under this item.

These elements were available or furnished to this Authority in the following language: , which is:

- the language of a translation furnished for the purposes of the international search (under Rule 23.1(b)).
- the language of publication of the international application (under Rule 48.3(b)).
- the language of a translation furnished for the purposes of international preliminary examination (under Rule 55.2 and/or 55.3).

3. With regard to any nucleotide and/or amino acid sequence disclosed in the international application, the international preliminary examination was carried out on the basis of the sequence listing:

- contained in the international application in written form.
- filed together with the international application in computer readable form.
- furnished subsequently to this Authority in written form.
- furnished subsequently to this Authority in computer readable form.
- The statement that the subsequently furnished written sequence listing does not go beyond the disclosure in the international application as filed has been furnished.
- The statement that the information recorded in computer readable form is identical to the written sequence listing has been furnished.

4. The amendments have resulted in the cancellation of:

- the description,       pages:
- the claims,              Nos.:

**INTERNATIONAL PRELIMINARY  
EXAMINATION REPORT**

International application No. PCT/EP99/06660

- the drawings,      sheets:
5.  This report has been established as if (some of) the amendments had not been made, since they have been considered to go beyond the disclosure as filed (Rule 70.2(c)):  
*(Any replacement sheet containing such amendments must be referred to under item 1 and annexed to this report.)*
6. Additional observations, if necessary:

**V. Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement**

1. Statement

Novelty (N)      Yes: Claims 5-14, 19, 21-30

No: Claims 1-4, 15-18, 20

Inventive step (IS)      Yes: Claims  
No: Claims 1-30

Industrial applicability (IA)      Yes: Claims 1-30  
No: Claims

2. Citations and explanations  
see separate sheet

**VII. Certain defects in the international application**

The following defects in the form or contents of the international application have been noted:  
see separate sheet

**VIII. Certain observations on the international application**

The following observations on the clarity of the claims, description, and drawings or on the question whether the claims are fully supported by the description, are made:  
see separate sheet

**Cited Documents**

D1: JIANZHONG ZHOU: 'Heterogeneous multicasting based on RSVP and QoS filters' COMMUNICATION TECHNOLOGY PROCEEDINGS, 1998, [Online] vol. 2, 22 - 24 October 1998, pages 1-8, XP002140105 ICCT '98 ISBN: 7-80090-827-5 Retrieved from the Internet: <URL:www.iel.ihs.com> [retrieved on 2000-06-14]

**Re Item V**

**Reasoned statement under Rule 66.2(a)(ii) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement**

1. The subject-matter of independent claim 1 is not novel, Art. 33 (1) and (2) PCT:
  - 1.1 D1, which relates to the same area of heterogeneous multicasting in packet-switched networks as the application, is considered as the closest prior art.

D1 discloses, in the terminology of claim 1, a method in a packet-switched network for supplying data packets to receivers belonging to a multicast group, comprising the steps of: receiving data packets from a sender; buffering data packets the destination address of which is a multicast address of a multicast group; determining the addresses of the receivers of the multicast group indicated by the multicast address (see Title, page 1, lines 6-9, page 2, lines 12-14, page 5, lines 13,14, Figure 4)(\*).

D1 also discloses the steps of determining receiver-specific parameters (page 2, line 19, page 4, lines 2-4), filtering the multicast data packets in accordance with the receiver-specific parameters for each receiver of the multicast group and supplying the filtered multicast data packets to the determined receiver addresses (page 4, last paragraph, page 5, point 3.3.1 and Fig. 4).

D1 therefore discloses all the features of claim 1.

(\*) It is further noted that lines 1-8 of Claim 1 are common knowledge in multicast technique as acknowledged by the Applicant in the Description, page 1, lines 20-

28. Some of the features defined in that part of Claim 1 may not be explicitly described in **D1**, however all these features (eg determining addresses belonging to a multicast group, buffering multicast packets) are inherent in the context of **D1**, which discloses multicasting based on RSVP and IGMP. See also eg IETF RFC 966, "A Multicast Extension to the Internet Protocol" dated Dec. 1985.

If novelty were disputable based on some minor difference of interpretation, it is pointed out that the subject-matter of claim 1 would in any case not involve an inventive step over the disclosure of **D1** (Art. 33(3) PCT), given that **D1** attempts to solve the same problem ("*considering different needs of different subscribers belonging to a multicast group*", lines 31, 32 of page 1 of the Description; "*...support for heterogeneous group communication..., the data stream to be forwarded can be tailored to the individual needs of single group members*", **D1**, page 1, last paragraph - page 2, first paragraph) and describes the same type of solution as presently claimed in claim 1.

2. The subject-matter of independent claim 6 does not involve an inventive step over the disclosure of **D1** and claim 6 therefore does not meet the requirements of Art. 33 (1) and (3) PCT:
  - 2.1 The only difference between the subject-matter of claim 6 and that of claim 1, which is fully anticipated by **D1**, is that **addresses** are filtered, ie packets are filtered depending on the **destination address**. However, this is a common variation. Actually, address filtering based on receiver-specific parameters as defined in claim 6 is also a type of packet filtering based on receiver-specific parameters as defined in claim 1, in which the filtering function is an abrupt one: packet discarding.
3. The lack of novelty objection starting from **D1** (Art. 33 (1) and (2) PCT) also applies to the subject-matter of independent claim 15, which corresponds to that of claim 1:
  - 3.1 Claim 15 relates to an apparatus in a packet-switched network comprising means which are characterized by performing the method steps defined in claim 1 and provides no additional technical feature. Therefore the reasoning in Point 1 also

applies to claim 15.

4. The lack of inventive step objection starting from **D1** (Art. 33 (1) and (3) PCT) also applies to the subject-matter of independent claim 21, which corresponds to that of claim 6:
  - 4.1 Claim 21 relates to an apparatus in a packet-switched network comprising means which are characterized by performing the method steps defined in claim 6 and provides no additional technical feature. Therefore the reasoning in Point 2 also applies to claim 21.
5. The additional features of dependent claims 2-5, 7-14, 16-20 and 22-30 do not seem to add anything novel and inventive to the independent claims because these features are either known from the closest prior art document **D1** (claims 2-4, 11, 16-18, 20, 22, 25, 26, 30) or common measures or variations (claims 5, 7-10, 12-14, 19, 23, 24, 27 and 28).
6. The application thus seems not to contain any patentable subject-matter.

Should the Applicant nevertheless have regarded some particular matter as patentable, an independent claim including such particular matter should have been filed, taking account of Rule 6.3(b) PCT. The Applicant should also have indicated in the letter of reply the difference vis à vis the state of the art and the inventive significance thereof.

**Re Item VII**

**Certain defects in the international application**

1. The independent claims should have been in the two-part form vis-à-vis **D1**, Rule 6.3(b) PCT.
2. **D1** should have been mentioned in the description, Rule 5.1(a)(ii) PCT.
3. The description should have been adapted to any new claims, Rule 5.1(a)(iii) PCT.

Re Item VIII

Certain observations on the international application

1. The claims should have defined the relevant subject-matter in terms of a single independent claim in each category followed by dependent claims covering features which are merely optional (conciseness, Art. 6 PCT and Rule 6.4 PCT). Although claims 1 and 6 have been drafted as separate independent claims, they appear to relate effectively to the same subject-matter and to differ from each other only with regard to the definition of the subject-matter for which protection is sought and in respect of the terminology used for the features of that subject-matter, see also Item V, Point 2.1. The aforementioned claims therefore lack conciseness. Moreover, lack of clarity of the claims as a whole arises, since the plurality of independent claims makes it difficult to determine the matter for which protection is sought, and places an undue burden on others seeking to establish the extent of the protection. A single independent claim in each category appears in this case appropriate.

Hence, claims 1 and 6 in the method category and the corresponding claims 15 and 21 in the apparatus category do not meet the requirements of Article 6 PCT.

2. The wording "without departing from the true spirit and scope of the invention" on page 11, line 23 of the description casts doubts on the scope of the claims (Art. 6 PCT), see PCT International Preliminary Examination Guidelines, III-4.3a.
3. The apparatus claims 15, 18, 20, 21, 22, 24, 27, 28 and 30 are partially characterized by method features (eg "...*wherein the routing means (2) filters...*" in claim 15), thus rendering the category of these claims unclear. This deficiency could have been overcome by re-wording these features with "adapted to", eg "...*wherein the routing means (2) is adapted to filter...*", etc. (Art. 6 PCT).
4. Claim 7 is rendered unclear (Art. 6 PCT) due to the lack of an antecedent definition for the expression "*the detected results*" (claim 7, line 18).

**PATENT COOPERATION TREATY**

From the  
INTERNATIONAL PRELIMINARY EXAMINING AUTHORITY

To:

LESON, Thomas

TIEDTKE-BÜHLING-KINNE

Bavariaring 4

D-80336 München

ALLEMAGNE

RECEIVED  
EINGEGANGEN

17. Dez. 2001

TBK - PATENT

Tr. o.A.

**PCT**

**NOTIFICATION OF TRANSMITTAL OF  
THE INTERNATIONAL PRELIMINARY  
EXAMINATION REPORT**

(PCT Rule 71.1)

Date of mailing (day/month/year)	14.12.2001
-------------------------------------	------------

Applicant's or agent's file reference

WO 24604

**IMPORTANT NOTIFICATION**

International application No. PCT/EP99/06660	International filing date (day/month/year) 09/09/1999	Priority date (day/month/year) 09/09/1999
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Applicant  
NOKIA NETWORKS OY

1. The applicant is hereby notified that this International Preliminary Examining Authority transmits herewith the international preliminary examination report and its annexes, if any, established on the international application.
2. A copy of the report and its annexes, if any, is being transmitted to the International Bureau for communication to all the elected Offices.
3. Where required by any of the elected Offices, the International Bureau will prepare an English translation of the report (but not of any annexes) and will transmit such translation to those Offices.

**4. REMINDER**

The applicant must enter the national phase before each elected Office by performing certain acts (filing translations and paying national fees) within 30 months from the priority date (or later in some Offices) (Article 39(1)) (see also the reminder sent by the International Bureau with Form PCT/IB/301).

Where a translation of the international application must be furnished to an elected Office, that translation must contain a translation of any annexes to the international preliminary examination report. It is the applicant's responsibility to prepare and furnish such translation directly to each elected Office concerned.

For further details on the applicable time limits and requirements of the elected Offices, see Volume II of the PCT Applicant's Guide.

Name and mailing address of the IPEA/

European Patent Office  
D-80298 Munich  
Tel. +49 89 2399 - 0 Tx: 523656 epmu d  
Fax: +49 89 2399 - 4465

Authorized officer

Barrio Baranano, A  
Tel. +49 89 2399-8621



**PCT REQUEST**

Original (for SUBMISSION) - printed on 09.09.1999 01:01:37 PM

0 0-1	For receiving Office use only International Application No.	
0-2	International Filing Date	
0-3	Name of receiving Office and "PCT International Application"	
0-4 0-4-1	Form - PCT/RO/101 PCT Request Prepared using	<b>PCT-EASY Version 2.83 (updated 01.03.1999)</b>
0-5	Petition The undersigned requests that the present international application be processed according to the Patent Cooperation Treaty	
0-6	Receiving Office (specified by the applicant)	
0-7	Applicant's or agent's file reference	
1	Title of invention	
II	Applicant	
II-1	This person is:	
II-2	Applicant for	
II-4	Name	
II-5	Address:	
II-6	State of nationality	
II-7	State of residence	
II-8	Telephone No.	
II-9	Facsimile No.	
III-1	Applicant and/or Inventor	
III-1-1	This person is:	
III-1-2	Applicant for	
III-1-4	Name (LAST, First)	
III-1-5	Address:	
III-1-6	State of nationality	
III-1-7	State of residence	

**PCT REQUEST**

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III-2	<b>Applicant and/or Inventor</b>	
III-2-1	This person is:	<b>applicant and inventor</b>
III-2-2	Applicant for	<b>US only</b>
III-2-4	Name (LAST, First)	<b>RAUTIAINEN, Aapo</b>
III-2-5	Address:	<b>c/o NOKIA TELECOMMUNICATIONS OY Keilalahdentie 4 FIN-02150 Espoo Finland</b>
III-2-6	State of nationality	<b>FI</b>
III-2-7	State of residence	<b>FI</b>
III-3	<b>Applicant and/or inventor</b>	
III-3-1	This person is:	<b>applicant and inventor</b>
III-3-2	Applicant for	<b>US only</b>
III-3-4	Name (LAST, First)	<b>LEPPÄNEN, Eva-Maria</b>
III-3-5	Address:	<b>c/o NOKIA TELECOMMUNICATIONS OY Keilalahdentie 4 FIN-02150 Espoo Finland</b>
III-3-6	State of nationality	<b>FI</b>
III-3-7	State of residence	<b>FI</b>
III-4	<b>Applicant and/or inventor</b>	
III-4-1	This person is:	<b>applicant and inventor</b>
III-4-2	Applicant for	<b>US only</b>
III-4-4	Name (LAST, First)	<b>TUDOSE, Lucia</b>
III-4-5	Address:	<b>c/o NOKIA TELECOMMUNICATIONS OY Keilalahdentie 4 FIN-02150 Espoo Finland</b>
III-4-6	State of nationality	<b>FI</b>
III-4-7	State of residence	<b>FI</b>
III-5	<b>Applicant and/or inventor</b>	
III-5-1	This person is:	<b>applicant and inventor</b>
III-5-2	Applicant for	<b>US only</b>
III-5-4	Name (LAST, First)	<b>NIEMINEN, Mari K.</b>
III-5-5	Address:	<b>c/o NOKIA TELECOMMUNICATIONS OY Keilalahdentie 4 FIN-02150 Espoo Finland</b>
III-5-6	State of nationality	<b>FI</b>
III-5-7	State of residence	<b>FI</b>

## PCT REQUEST

Original (for SUBMISSION) - printed on 09.09.1999 01:01:37 PM

IV-1	<b>Agent or common representative; or address for correspondence</b> The person identified below is hereby/has been appointed to act on behalf of the applicant(s) before the competent International Authorities as: Name (LAST, First) Address:	
IV-1-1	PELTMANN, Hans-Bernd	
IV-1-2	Tiedtke-Bühling-Kinne Bavariaring 4 D-80336 Munich Germany	
IV-1-3	Telephone No. +89 54 46 90	
IV-1-4	Facsimile No. +89 53 26 11	
IV-2	<b>Additional agent(s)</b> additional agent(s) with same address as first named agent	
IV-2-1	TIEDTKE, Harro; BÜHLING, Gerhard; KINNE, Reinhard; GRAMS, Klaus; LINK, Annette; VOLLNHALS, Aurel; LESON, Thomas, Johannes, Alois; TRÖSCH, Hans-Ludwig; CHIVAROV, Georgi; GRILL, Matthias; KÜHN, Alexander; OSER, Andreas; BÖCKELEN, Rainer	
V	<b>Designation of States</b>	
V-1	Regional Patent (other kinds of protection or treatment, if any, are specified between parentheses after the designation(s) concerned)	
AP: GH GM KE LS MW SD SZ UG ZW and any other State which is a Contracting State of the Harare Protocol and of the PCT EA: AM AZ BY KG KZ MD RU TJ TM and any other State which is a Contracting State of the Eurasian Patent Convention and of the PCT EP: AT BE CH&LI CY DE DK ES FI FR GB GR IE IT LU MC NL PT SE and any other State which is a Contracting State of the European Patent Convention and of the PCT OA: BF BJ CF CG CI CM GA GN GW ML MR NE SN TD TG and any other State which is a member State of OAPI and a Contracting State of the PCT		
V-2	National Patent (other kinds of protection or treatment, if any, are specified between parentheses after the designation(s) concerned)	
AE AL AM AT AU AZ BA BB BG BR BY CA CH&LI CN CU CZ DE DK EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MD MG MK MN MW MX NO NZ PL PT RO RU SD SE SG SI SK SL TJ TM TR TT UA UG US UZ VN YU ZA ZW		

## PCT REQUEST

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V-5	<b>Precautionary Designation Statement</b> In addition to the designations made under items V-1, V-2 and V-3, the applicant also makes under Rule 4.9(b) all designations which would be permitted under the PCT except any designation(s) of the State(s) indicated under item V-6 below. The applicant declares that those additional designations are subject to confirmation and that any designation which is not confirmed before the expiration of 15 months from the priority date is to be regarded as withdrawn by the applicant at the expiration of that time limit.		
V-6	<b>Exclusion(s) from precautionary designations</b>		
VI	<b>Priority claim</b>		
VII-1	<b>International Searching Authority Chosen</b>		
VIII	Check list	number of sheets	electronic file(s) attached
VIII-1	Request	5	-
VIII-2	Description	11	-
VIII-3	Claims	6	-
VIII-4	Abstract	1	03_abstract.txt
VIII-5	Drawings	3	-
VIII-7	TOTAL	26	
VIII-8	Accompanying items	paper document(s) attached	electronic file(s) attached
VIII-16	Fee calculation sheet	✓	-
VIII-16	PCT-EASY diskette	-	diskette
VIII-18	Figure of the drawings which should accompany the abstract	1	
VIII-19	Language of filing of the international application	English	
IX-1	Signature of applicant or agent		
IX-1-1	Name (LAST, First)	PELLMANN, Hans-Bernd	

**FOR RECEIVING OFFICE USE ONLY**

10-1	Date of actual receipt of the purported international application	
10-2	Drawings:	
10-2-1	Received	
10-2-2	Not received	
10-3	Corrected date of actual receipt due to later but timely received papers or drawings completing the purported international application	
10-4	Date of timely receipt of the required corrections under PCT Article 11(2)	
10-5	International Searching Authority	ISA/EP
10-6	Transmittal of search copy delayed until search fee is paid	

**PCT REQUEST**

WO 24604

Original (for SUBMISSION) - printed on 09.09.1999 01:01:37 PM

**FOR INTERNATIONAL BUREAU USE ONLY**

11-1	Date of receipt of the record copy by the International Bureau	
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## PATENT COOPERATION TREATY

## PCT

## INTERNATIONAL SEARCH REPORT

(PCT Article 18 and Rules 43 and 44)

Applicant's or agent's file reference <b>WO 24604</b>	<b>FOR FURTHER ACTION</b> see Notification of Transmittal of International Search Report (Form PCT/ISA/220) as well as, where applicable, item 5 below.	
International application No. <b>PCT/EP 99/06660</b>	International filing date (day/month/year) <b>09/09/1999</b>	(Earliest) Priority Date (day/month/year)
Applicant <b>NOKIA NETWORKS OY</b>		

This International Search Report has been prepared by this International Searching Authority and is transmitted to the applicant according to Article 18. A copy is being transmitted to the International Bureau.

This International Search Report consists of a total of 3 sheets.

It is also accompanied by a copy of each prior art document cited in this report.

**1. Basis of the report**

- a. With regard to the **language**, the international search was carried out on the basis of the international application in the language in which it was filed, unless otherwise indicated under this item.
  - the international search was carried out on the basis of a translation of the international application furnished to this Authority (Rule 23.1(b)).
- b. With regard to any **nucleotide and/or amino acid sequence** disclosed in the international application, the international search was carried out on the basis of the sequence listing :
  - contained in the international application in written form.
  - filed together with the international application in computer readable form.
  - furnished subsequently to this Authority in written form.
  - furnished subsequently to this Authority in computer readable form.
  - the statement that the subsequently furnished written sequence listing does not go beyond the disclosure in the international application as filed has been furnished.
  - the statement that the information recorded in computer readable form is identical to the written sequence listing has been furnished

2.  **Certain claims were found unsearchable (See Box I).**

3.  **Unity of Invention is lacking (see Box II).**

4. With regard to the **title**,

- the text is approved as submitted by the applicant.
- the text has been established by this Authority to read as follows:

5. With regard to the **abstract**,

- the text is approved as submitted by the applicant.
- the text has been established, according to Rule 38.2(b), by this Authority as it appears in Box III. The applicant may, within one month from the date of mailing of this international search report, submit comments to this Authority.

6. The figure of the **drawings** to be published with the abstract is Figure No.

- as suggested by the applicant.
- because the applicant failed to suggest a figure.
- because this figure better characterizes the invention.

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None of the figures.